

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number **10211078 A**

(43) Date of publication of application **11.08.98**

(51) Int. Cl. **A47G 23/03**

(21) Application number: **08306329**

(22) Date of filing: **18.11.96**

(71) Applicant **YAMAURA SHIKI INSATSU KK**

(72) Inventor: **YAMAURA HARUHISA**

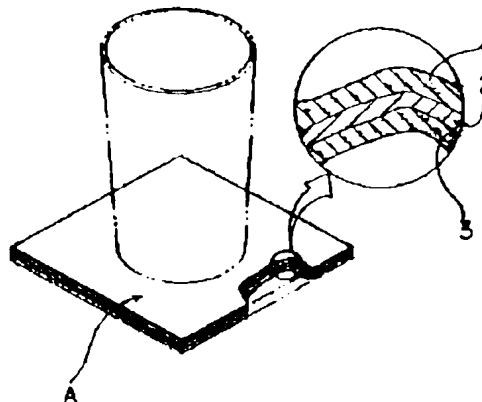
(54) **COASTER**

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a coaster with improved durability and convenience provided by suppressed use of expensive cork, by forming the top and bottom boards of the coaster with cork and intervening a core board made of a material non-extensible by drawing between top and bottom boards to make a sandwich structure.

SOLUTION: This coaster A is formed into a sandwich structure by intervening a core board 2 made of a material non-extensible by drawing between the top and bottom boards 1, 3 made of cork, and printing on the surface of the coaster A is carried out by offset printing in an intermediate forming process for the top board 1 and the bottom board 2. The coaster A is made 1-2mm in thickness and formed by adhering top board 1 and bottom board 3 made of cork onto the top and bottom faces of the core board 2. The core board 2 can be made of a polyvinyl chloride resin sheet (about 0.5-1.0mm thick), paper, or polystyrene paper with similar thickness. The coaster A can be constituted as a jigsaw puzzle assembled playing.

COPYRIGHT (C)1998,JPO



PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-211078

(43)Date of publication of application : 11.08.1998

(51)Int.Cl.

A47G 23/03

(21)Application number : 08-306329

(71)Applicant : YAMAURA SHIKI INSATSU KK

(22)Date of filing : 18.11.1996

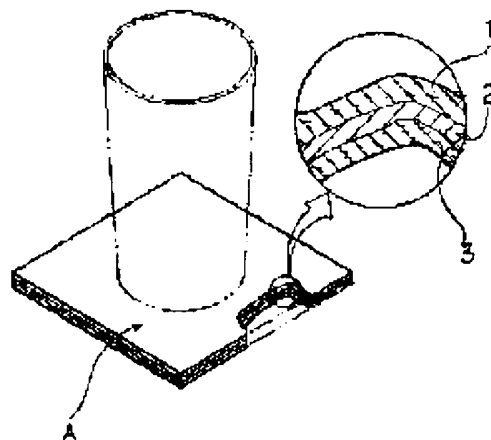
(72)Inventor : YAMAURA HARUHISA

(54) COASTER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a coaster with improved durability and convenience provided by suppressed use of expensive cork, by forming the top and bottom boards of the coaster with cork and intervening a core board made of a material non-extensible by drawing between top and bottom boards to make a sandwich structure.

SOLUTION: This coaster A is formed into a sandwich structure by intervening a core board 2 made of a material non-extensible by drawing between the top and bottom boards 1, 3 made of cork, and printing on the surface of the coaster A is carried out by offset printing in an intermediate forming process for the top board 1 and the bottom board 2. The coaster A is made 1-2mm in thickness and formed by adhering top board 1 and bottom board 3 made of cork onto the top and bottom faces of the core board 2. The core board 2 can be made of a polyvinyl chloride resin sheet (about 0.5-1.0mm thick), paper, or polystyrene paper with similar thickness. The coaster A can be constituted as a jigsaw puzzle assembled playing.



LEGAL STATUS

[Date of sending the examiner's decision of

rejection]

[Kind of final disposal of application other than
the examiner's decision of rejection or
application converted registration]

[Date of final disposal for application]

[Patent number] 2954046

[Date of registration] 16.07.1999

[Number of appeal against examiner's
decision of rejection]

[Date of requesting appeal against examiner's
decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office

concerned -- the shape of a plank -- becoming -- **** -- ***** -- the thing was the present condition It becomes the offset press that it is hard to make it pass with a sufficient condition it not only becomes expensive, but, and it becomes impossible in addition, to carry out predetermined printing, although the sublation for the pars marginalis and a chip can be prevented since rigidity can be given, if it is made heavy-gage.

[0004] The place made into other purposes in this invention having been conventionally made in view of the situation, and the place made into the purpose giving rigidity, without making it heavy-gage after suppressing use of an expensive cork few (making it strong), and offering the coaster which raises endurance and a use kitchen, without checking the property of a cork is again to offer the coaster to which play is made. Furthermore, the place made into other purposes is to offer the coaster which obtains a peculiar appearance and the palpation by offset printing.

[0005]

[Means for Solving the Problem] Let it be a summary that the technical means provided in order to attain the above-mentioned purpose make the core plate which consists of a material which is not extended even if a claim 1 fabricates a front backing with a cork and it is pulled between the front backing the sandwich structure which intervened. Moreover, a claim 2 makes it a summary to carry out the polymerization of the backing which becomes the rear face of the front plate which consists of a material which is not extended even if it is pulled from a cork. And a claim 3 makes it a summary that the coaster according to claim 1 constitutes the jigsaw puzzle. Moreover, a claim 4 makes it a summary that the coaster according to claim 2 constitutes the jigsaw puzzle. Furthermore, a claim 5 makes it a summary that the coaster according to claim 1 or 3 has performed offset printing to the front face. The styrene paper of thickness etc. is mentioned like a vinylchloride resin sheet (about 0.5-1.0mm in thickness), paper (0.01-0.4mm in thickness preferably board with a thickness of about 0.3-0.4mm), and the aforementioned vinylchloride resin sheet and paper as a material which is not extended even if it is pulled the account of a front.

[0006] According to the above-mentioned technical means, an operation is done so for the following.

(Claim 1) Rigidity is given to the coaster made from a cork, without the core plate which consists of a material not to extend making it heavy-gage, even if it is pulled.

(Claim 2) Rigidity is given to the coaster made from a cork, after the front plate which consists of a material not to extend attains thinning, even if it was pulled.

(Claim 3) Predetermined printings (a pattern, a man's face, etc.) are expressed at the same time a coaster is completed by the attachment play which repeats the combination which chooses the divided piece. Moreover, the bonding strength which the flexibility of a cork acts effectively, and the completed jigsaw puzzle hardly has a visible break, and expresses printing (a pattern, a man's face) predetermined [continuous] without *****, and does not have both piece ***** is demonstrated.

(Claim 4) offset printing which was printing nonconformance in the former by the reinforcement function of a core plate which consists of a material which is not extended even if it is pulled -- being possible -- by combining offset printing with the present invention.

[0007]

[Embodiments of the Invention] Next, the gestalt of operation of this invention is explained based on a drawing. Drawing 1 , the drawing 2 , the drawing 3 , and the drawing 4 show the gestalt of each operation of a coaster. First, it is [0008] when it explains based on drawing 1 . Sign A is made into the sandwich structure which intervened the core plate 2 which consists of a material which is not extended even if it is a coaster, and it fabricates the front backings 1 and 3 with a cork and it is pulled between the front backing 1 and 3.

[0009] This coaster A sets thickness to about 1-2mm, sticks respectively the front plate 1 made from a cork, and the backing 3 on the front reverse of the core plate 2 of a board (about 0.01-0.4mm in thickness), and is fabricated.

[0010] Printing to this coaster A front face is performed by offset printing in the halfway molding phase which consists of a front plate 1 and a core plate 2, before sticking a backing 3. A pattern, a man's face, pictures, a character, etc. are nursed suitably, and printing expresses [a character etc.] a **** thing for a person's scale divisions.

[0011] The aforementioned core plate 2 tends to reinforce an intensity, without causing heavy-gage-ization, when thick, it becomes that it is hard to pass the offset press with a sufficient condition, and in being conversely thin, the intensity for which it asks comes to seldom obtain it. The good result which holds uniformly the thickness at the time of an intensity being satisfied when a board with a thickness of about 0.02-0.04mm is used according to the test, and offsetting was obtained.

[0012] although it was thought that it was based on matching with a cork and offset printing although offset printing will be carried out to the front face of the front plate 1 made from a cork if the coaster of the halfway molding phase which consists of a front plate 1 and a core plate 2 before sticking a backing 3 as mentioned above is passed between the rollers for printing of the offset press, cloth was printed also for* -- as -- some -- fluff -- it becomes the workpiece of the peculiar surface result which carried out fluff

[0013] After a backing 3 performs offset printing to a front face, it is stuck on the rear face of a core plate 2.

[0014] Thus, without daring make it heavy-gage like the coaster currently fabricated with the cork simple substance, coaster A of the sandwich structure which intervened the core plate 2 which consists of a material which is not extended even if it is pulled between the front backing 1 made from a cork and 3 can reinforce an intensity, can prevent and double peeling of the cork from a part for the pars marginalis, and absence, can make offset printing possible, and can acquire the peculiar palpation and an appearance.

[0015] Next, if it explains based on drawing 2 , this coaster A consists of the jigsaw puzzle B attached while playing the thing of the gestalt of the aforementioned implementation.

[0016] The rich elasticity of a cork and flexibility direct their attention, it is made, and this coaster A is the rich elasticity, flexibility, therefore piece b: Mutual sticks without an opening exactly, the break b1 by the punching almost disappears, and it goes into a visual sense as continuous printing offset printing does not have whose way piece, and

[0018] Next, if it explains based on drawing 3 , this coaster A has the two-layer structure which stuck the backing 3 made from a cork on the rear face of the front plate 4 which consists of a material which is not extended even if it is pulled.

[0019] With this two-layer structure, use of a cork could be stopped to minimum, the cost was able to be reduced further upwards, and strong reinforcement can be aimed at.

[0020] printing to a front face-- offset printing and screenstencil -- whichever it uses it, it is arbitrary, and thickness does not become uneven by the function of the front plate 4 which consists of a material which is not extended even if it is pulled, when it offsets, and printing spots do not remain, either As for a front plate, in the case of the gestalt of this operation, it is desirable to fabricate with the material which has the durability of a vinylchloride resin sheet etc. in consideration of endurance deteriorating by penetration of the moisture (luxury goods, such as coffee, sap, and tea) which adhered to the cop carried if it is a product (board) made from ~~paper~~ as mentioned above, or fell.

[0021] Next, there is an advantage which does not take space even if it puts in the shape of multi-stage, since thinning becomes possible, although the gestalt of this operation constitutes coaster A of drawing 3 from jigsaw puzzle B and there are no thing and differentiation in drawing 2 in operation when drawing 4 is explained.

[0022] Moreover, although the shape of a plane view rectangle is presented by illustration in coaster A ** which consisted of jigsaw puzzle B as shown in drawing 2 or the drawing 4 , you may be made to form the plane view configuration of a request of an appearance configuration. For example, if printing is a man's face, the plane view configuration of coaster A is also at the condition of a man's face. If it does in this way, it will attach and play will also become more interesting, and an availability increases by using properly by liking of a user or liking of a customer. Of course, you may make similarly into the plane view configuration of the shape of printing and isomorphism coaster A shown in drawing 1 and the drawing 3 .

[0023]

[Effect of the Invention] Since this invention was constituted as mentioned above, it has the following advantage.

(Claims 1 and 2) The amount of the cork used can be reduced, a coaster being able to become strong, and a cork being unable to separate, but being able to raise endurance, being able to improve a use kitchen with the core plate and front plate which consist of a material not to extend, and employing the property of a cork efficiently, even if it is pulled, and it can provide under cheap.

(Claim 3) a plaything since surface printings (a pattern, a man's face, etc.) are also done when the divided piece is attached and a jigsaw puzzle is completed ***** -- it can be used -- ***** -- it becomes a significant coaster And this jigsaw puzzle hardly has a visible break by the flexibility of a cork, can adopt positively a man's face which was hard to adopt until now since printing predetermined [continuous] without ***** was expressed, and does not have a fear of becoming a rose rose at the time of use.

(Claim 4) since the core plate which consists of a material not to extend is moreover prepared and printed even if it is pulled -- extension -- being lost -- offset printing which was not able to be conventionally printed on a cork -- a front face -- some -- fluff -- the

Field

[The technical field to which invention belongs] this invention relates to enhancement of a coaster.

Technique

[Description of the Prior Art] The coaster is fabricated with various materials. There is coaster A made from the cork which is shown in drawing 5 as one. It has a variety of property that a cork is not slippery in the use location [where frictional resistance got wet greatly] which is rich in light elasticity or light flexibility from making the bark or rubber of a cork oak into a raw material, and being manufactured, which seldom absorbs moisture, which seldom carries out aeration etc.

Effect

[Effect of the Invention] Since this invention was constituted as mentioned above, it has the following advantage.

(Claims 1 and 2) The amount of the cork used can be reduced, a coaster being able to become strong, and a cork being unable to separate, but being able to raise endurance, being able to improve a use kitchen with the core plate and front plate which consist of a material not to extend, and employing the property of a cork efficiently, even if it is pulled, and it can provide under cheap.

(Claim 3) a plaything since surface printings (a pattern, a man's face, etc.) are also done when the divided piece is attached and a jigsaw puzzle is completed ***** -- it can be used -- ***** -- it becomes a significant coaster And this jigsaw puzzle hardly has a visible break by the flexibility of a cork, can adopt positively a man's face which was hard to adopt until now since printing predetermined [continuous] without ***** was expressed, and does not have a fear of becoming a rose rose at the time of use.

(Claim 4) since the core plate which consists of a material not to extend is moreover prepared and printed even if it is pulled -- extension -- being lost -- offset printing which was not able to be conventionally printed on a cork -- a front face -- some -- fluff -- the coaster of peculiar appearance and palpation which carried out fluff obtains -- having -- a goods value -- it is great

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] However, when fabricated with the cork simple substance, flexibility of an organization is made into a factor, the amount of pars marginalis exfoliates and there is a missing problem. Moreover, the technique of printing on this coaster has common screenstencil, and offset printing was not adopted. If the ground passes between the rolls for printing, such as a version drum of the offset press, in

even, the yield falls in generating printing spots is mentioned as a cause. Moreover, the

coaster is fabricated with the cork simple substance -- it is not -- alike -- not being concerned -- the shape of a plank -- becoming -- **** -- ***** -- the thing was the present condition It becomes the offset press that it is hard to make it pass with a sufficient condition it not only becomes expensive, but, and it becomes impossible in addition, to carry out predetermined printing, although the sublation for the pars marginalis and a chip can be prevented since rigidity can be given, if it is made heavy-gage.

[0004] The place made into other purposes in this invention having been conventionally made in view of the situation, and the place made into the purpose giving rigidity, without making it heavy-gage after suppressing use of an expensive cork few (making it strong), and offering the coaster which raises endurance and a use kitchen, without checking the property of a cork is again to offer the coaster to which play is made. Furthermore, the place made into other purposes is to offer the coaster which obtains a peculiar appearance and the palpation by offset printing.

MEANS

[Means for Solving the Problem] Let it be a summary that the technical means provided in order to attain the above-mentioned purpose make the core plate which consists of a material which is not extended even if a claim 1 fabricates a front backing with a cork and it is pulled between the front backing the sandwich structure which intervened. Moreover, a claim 2 makes it a summary to carry out the polymerization of the backing which becomes the rear face of the front plate which consists of a material which is not extended even if it is pulled from a cork. And a claim 3 makes it a summary that the coaster according to claim 1 constitutes the jigsaw puzzle. Moreover, a claim 4 makes it a summary that the coaster according to claim 2 constitutes the jigsaw puzzle. Furthermore, a claim 5 makes it a summary that the coaster according to claim 1 or 3 has performed offset printing to the front face. The styrene paper of thickness etc. is mentioned like a vinylchloride resin sheet (about 0.5-1.0mm in thickness), paper (0.01-0.4mm in thickness preferably board with a thickness of about 0.3-0.4mm), and the aforementioned vinylchloride resin sheet and paper as a material which is not extended even if it is pulled the account of a front.

[0006] According to the above-mentioned technical means, an operation is done so for the following.

(Claim 1) Rigidity is given to the coaster made from a cork, without the core plate which consists of a material not to extend making it heavy-gage, even if it is pulled.

(Claim 2) Rigidity is given to the coaster made from a cork, after the front plate which consists of a material not to extend attains thinning, even if it was pulled.

(Claim 3) Predetermined printings (a pattern, a man's face, etc.) are expressed at the same time a coaster is completed by the attachment play which repeats the combination which chooses the divided piece. Moreover, the bonding strength which the flexibility of a cork acts effectively, and the completed jigsaw puzzle hardly has a visible break, and

(Claim 4) offset printing which was printing nonconformance in the former by the

reinforcement function of a core plate which consists of a material which is not extended even if it is pulled -- being possible -- becoming -offset printing -- some --fluff -- the coaster of the appearance and palpation which makes it the peculiar surface finish which carried out fluff, and was not obtained until now is obtained

[0007]

[Embodiments of the Invention] Next, the gestalt of operation of this invention is explained based on a drawing. Drawing 1 , the drawing 2 , the drawing 3 , and the drawing 4 show the gestalt of each operation of a coaster. First, it is [0008] when it explains based on drawing 1 . Sign A is made into the sandwich structure which intervened the core plate 2 which consists of a material which is not extended even if it is a coaster, and it fabricates the front backings 1 and 3 with a cork and it is pulled between the front backing 1 and 3.

[0009] This coaster A sets thickness to about 1-2mm, sticks respectively the front plate 1 made from a cork, and the backing 3 on the front reverse of the core plate 2 of a board (about 0.01-0.4mm in thickness), and is fabricated.

[0010] Printing to this coaster A front face is performed by offset printing in the halfway molding phase which consists of a front plate 1 and a core plate 2, before sticking a backing 3. A pattern, a man's face, pictures, a character, etc. are nursed suitably, and printing expresses [a character etc.] a **** thing for a person's scale divisions.

[0011] The aforementioned core plate 2 tends to reinforce an intensity, without causing heavy-gage-ization, when thick, it becomes that it is hard to pass the offset press with a sufficient condition, and in being conversely thin, the intensity for which it asks comes to seldom obtain it. The good result which holds uniformly the thickness at the time of an intensity being satisfied when a board with a thickness of about 0.02-0.04mm is used according to the test, and offsetting was obtained.

[0012] although it was thought that it was based on matching with a cork and offset printing although offset printing will be carried out to the front face of the front plate 1 made from a cork if the coaster of the halfway molding phase which consists of a front plate 1 and a core plate 2 before sticking a backing 3 as mentioned above is passed between the rollers for printing of the offset press, cloth was printed also for ** -- as -- some -- fluff -- it becomes the workpiece of the peculiar surface result which carried out fluff

[0013] After a backing 3 performs offset printing to a front face, it is stuck on the rear face of a core plate 2.

[0014] Thus, without daring make it heavy-gage like the coaster currently fabricated with the cork simple substance, coaster A of the sandwich structure which intervened the core plate 2 which consists of a material which is not extended even if it is pulled between the front backing 1 made from a cork and 3 can reinforce an intensity, can prevent and double peeling of the cork from a part for the pars marginalis, and absence, can make offset printing possible, and can acquire the peculiar palpation and an appearance.

[0015] Next, if it explains based on drawing 2 , this coaster A consists of the jigsaw puzzle B attached while playing the thing of the gestalt of the aforementioned implementation.

visual sense as continuous printing offset printing does not have whose way piece, and each piece b-- comes to seldom come apart.

[0017] A punching prints, and after it sticks a backing 3 on the rear face of a core plate 2, it is performed.

[0018] Next, if it explains based on drawing 3 , this coaster A has the two-layer structure which stuck the backing 3 made from a cork on the rear face of the front plate 4 which consists of a material which is not extended even if it is pulled.

[0019] With this two-layer structure, use of a cork could be stopped to minimum, the cost was able to be reduced further upwards, and strong reinforcement can be aimed at.

[0020] printing to a front face-- offset printing and screenstencil -- whichever it uses it, it is arbitrary, and thickness does not become uneven by the function of the front plate 4 which consists of a material which is not extended even if it is pulled, when it offsets, and printing spots do not remain, either As for a front plate, in the case of the gestalt of this operation, it is desirable to fabricate with the material which has the durability of a vinylchloride resin sheet etc. in consideration of endurance deteriorating by penetration of the moisture (luxury goods, such as coffee, sap, and tea) which adhered to the cop carried if it is a product (board) made from paper as mentioned above, or fell.

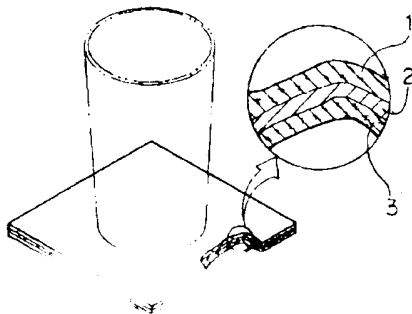
[0021] Next, there is an advantage which does not take space even if it puts in the shape of multi-stage, since thinning becomes possible, although the gestalt of this operation constitutes coaster A of drawing 3 from jigsaw puzzle B and there are no thing and differentiation in drawing 2 in operation when drawing 4 is explained.

[0022] Moreover, although the shape of a plane view rectangle is presented by illustration in coaster A ** which consisted of jigsaw puzzle B as shown in drawing 2 or the drawing 4 , you may be made to form the plane view configuration of a request of an appearance configuration. For example, if printing is a man's face, the plane view configuration of coaster A is also at the condition of a man's face. If it does in this way, it will attach and play will also become more interesting, and an availability increases by using properly by liking of a user or liking of a customer. Of course, you may make similarly into the plane view configuration of the shape of printing and isomorphism coaster A shown in drawing 1 and the drawing 3 .

DESCRIPTION OF DRAWINGS

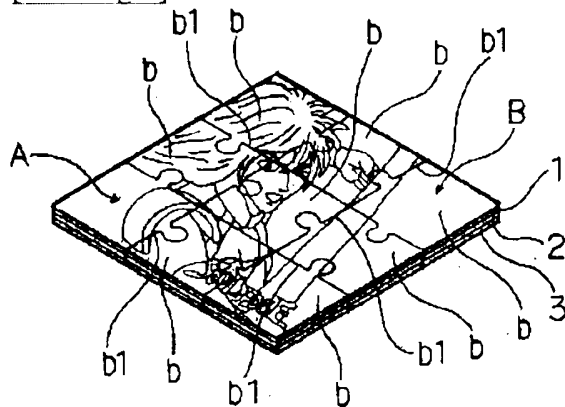
[Brief Description of the Drawings]

[Drawing 1]



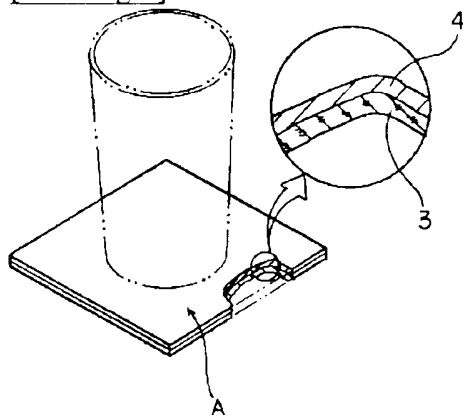
The core plate which consists of a material which is not extended even if it is pulled is cut in part, and the perspective diagram of the coaster at the time of intervening shows it.

[Drawing 2]



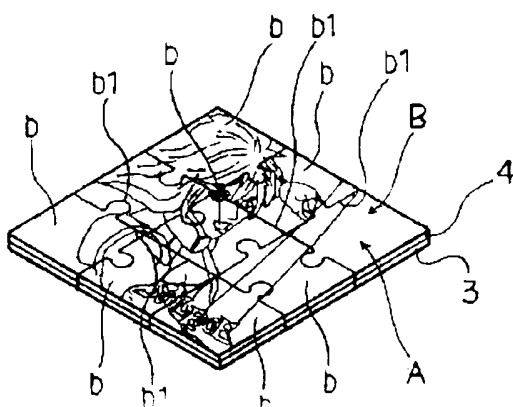
The perspective diagram at the time of constituting this coaster from a jigsaw puzzle.

[Drawing 3]

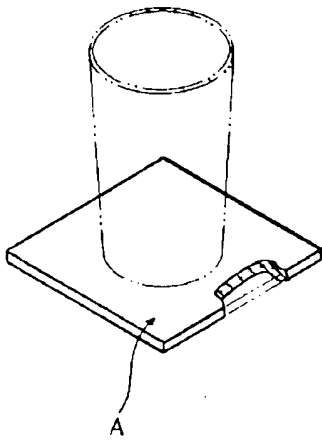


A part is cut and the perspective diagram of the coaster at the time of using the front plate which consists of a material which is not extended even if it is pulled shows.

[Drawing 4]



[Drawing 5]



The conventional coaster carries out a perspective diagram ***** notch, and it is shown.

[Description of Notations]

A : coaster B : Jigsaw puzzle

1 : Table Plate 3 : Backing

2 : Core Plate Which Consists of a Material Which is not Extended even if it is Pulled

4 : Front Plate Which Consists of a Material Which is not Extended even if it is Pulled

b : piece b1:break